6FD7

Dual Triode

With High-Mu Unit and Low-Mu Unit

GENERAL DATA

Electrical:

Heater Characteristics and Ratings *(Design-Maximum Values):*

Voltage (AC or DC)	6.3 ± 0.6		volts
Current at heater volts = 6.3	0.925		amp
Peak heater-cathode voltage (Each unit):			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200[a]	max.	volts

Direct Interelectrode Capacitances (Approx.):[b]

	Unit No.1	Unit No.2	
Grid to plate	4.5	10	μμf
Grid to cathode and heater	2.2	6.5	μμf
Plate to cathode and heater	0.4	1.2	μμf

Characteristics, Class A₁ Amplifier:

	Unit No.1	Unit No.2		
Plate Voltage	250	60	150	volts
Grid Voltage	-3	0	-17.5	volts
Amplification Factor	64	-	6	
Plate Resistance (Approx.)	40000	-	800	ohms
Transconductance	1600	-	7500	μmhos
Plate Current	1.4	95[c]	40	ma
Grid Voltage (Approx.) for plate μa =,				
10	-5.5	-	-	volts
100	-	-	-40	volts
Transconductance for plate ma. = 1	-	-	500	μmhos
Plate Current for grid volts = -25	-	-	6	ma

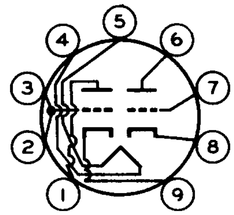
Mechanical:

Operating Position	Any
Type of Cathodes	Coated Unipotential
Maximum Overall Length	2.900"
Maximum Seated Length	2.620"
Length, Base Seat to Bulb Top (Excluding tip)	2.070" to 2.310"
Diameter	1.062" to 1.188"
Bulb	T9
Base	JEDEC No.E9-82

6FD7

Basing Designation for BOTTOM VIEW. 9HF

Pin 1 - Plate of Unit No.2
Pin 2 - Grid of Unit No.2
Pin 3 - Grid of Unit No.2
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Plate of Unit No.1
Pin 7 - Grid of Unit No.1
Pin 8 - Cathode of Unit No.1
Pin 9 - Cathode of Unit No.2

VERTICAL-DEFLECTION OSCILLATOR

Values are for Unit No.1

Maximum Ratings, *Design-Maximum Values:*

For operation in a 525-line, 30-frame system[d]

DC PLATE VOLTAGE	330 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	400 max.	volts
CATHODE CURRENT:		
Peak	70 max.	ma
Average	20 max.	ma
PLATE DISSIPATION	1.5 max.	watts

Maximum Circuit Values:

Grid-Circuit Resistance:		
For grid-resistor-bias or cathode-bias operation	2.2 max.	megohms

VERTICAL-DEFLECTION AMPLIFIER

Values are for Unit No.2

Maximum Ratings, *Design-Maximum Values:*

For operation in a 525-line, 30-frame system[d]

DC PLATE VOLTAGE	330 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE[e]	1500 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	250 max.	volts
CATHODE CURRENT:		
Peak	175 max.	ma
Average	50 max.	ma
PLATE DISSIPATION	10 max.	watts

Maximum Circuit Values:

Grid-Circuit Resistance:		
For grid-resistor-bias or cathode-bias operation	2.2 max.	megohms

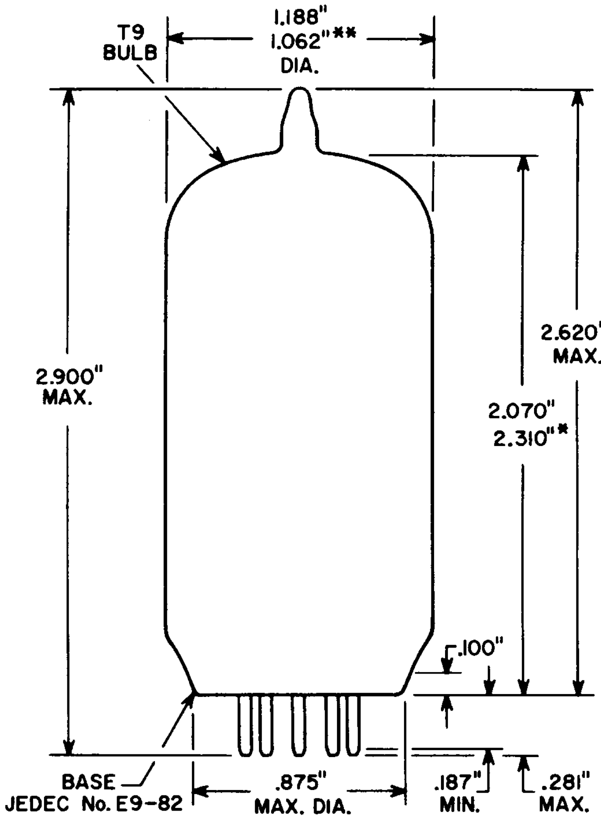
[a] The dc component must not exceed 100 volts.

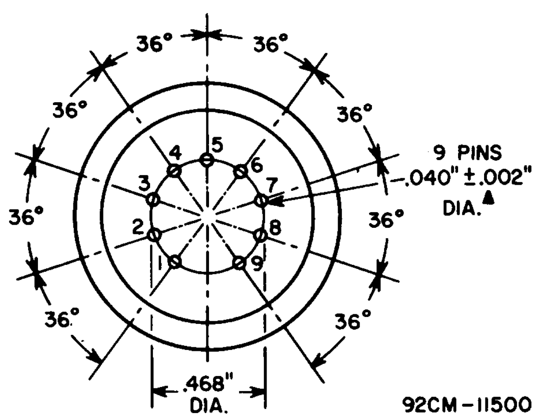
[b] Without external shield.

[c] This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded

[d] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

[e] This rating is applicable when the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.





92CM-11500

** APPLIES IN ZONE STARTING 0.625" FROM BASE SEAT.

* MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY A RING GAUGE OF 0.600" INSIDE DIAMETER.

▲ BASE-PIN CONTOUR AND GAUGE (JEDEC No. GE9-4) INFORMATION FOR THIS BASE IS THE SAME AS THAT SHOWN IN GENERAL SECTION FOR BASE JEDEC No. E9-68 (LARGE-BUTTON NEONOVAL 9-PIN).